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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SHANG, ANNAN Q

ART UNIT	PAPER NUMBER
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2614

15

DATE MAILED: 10/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/300,784

Applicant(s)

KIRALY, JOZSEF

Examiner

Annan Q Shang

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1- 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Monteiro et al (6,434,622)** view of **Ice (5,884,031)**, and further in view of **Fujita et al (6,349,349)** newly cited.

As to claim 1, note the **Monteiro et al** reference Figures 1, 3 and 4, disclose a multicasting method and apparatus and a scalable architecture for delivery of real-time information over a communication network where multiple streams of information can be delivered to a user, and certain portions of the information being delivery can be tailored to individual user further discloses a communication system comprising the following: the claimed "plurality of information receiver and re-transmitter devices (IRRTs)..." are met by plurality of Media Servers (MSs) 30 which are coupled to the Internet (col. 6, line 35-col. 7, line 10) note each MSs 30 is coupled the Internet and streams audio and video data using UDP protocol under IP and TCP/IP protocol (col. 6, line 66-col. 7, line 10 and col. 8, lines 42-49), and each MS 30 receives and broadcast information and selectively retransmits the broadcast information to a plurality of MSs 30 (col. 3, lines 1-25 and col. 5, line 66-col. 6, line 34), the claimed "plurality of primary broadcast servers..." are met by the plurality of broadcast stations: Satellite, Cable, Broadcast and

Hard disk which feeds broadcast to Network 10, the Internet, each for originating respective primary broadcast information that is chain-cast among a group of MSs 30 of the plurality of MSs 30, the claimed "plurality of secondary servers..." are met by Primary Servers 20, each for originating respective secondary broadcast information, that is chain-cast among a group of MSs 30 of a plurality of MSs 30, the claimed "chaincast manager..." is met by Administration Server (AdmS) 60 and Control Servers 50 which are coupled to the internet and for registering the plurality of primary and secondary broadcast servers and for scheduling information transfers of the respective primary broadcast information to MSs 30 based on the broadcast requests generated by the MSs 30 to the AdmS 60 and Control Server 50, note Figure 1 and col. 3, lines 13-63. Monteiro teaches Media servers that receives and forward information, but fails to specifically teach rendering the information at the various Media Servers.

However, note the **Ice** reference figure 1, discloses a method for making connections on the internet, and for causing connections to be made among client systems into a broadcast network where a plurality of Client Systems (Cn) (figure 1 and col. 2, lines 1-22), are couple to the Internet and receives and renders broadcast information and selectively retransmit the broadcast information to other Clients C1 and C2, note that after C1 and C2 establishes direct connection to Server A, when a new Client C3 requests a connection to server A it receives an instruction from server A for connection to Client C1 and similarly additional Clients C4-C6 follow same sequence as instructed by Server A, note also that the client system may be performing calculations

or providing other functions for the user and the command to make a new connection could come from the user interaction with the system, note col. 3, line 50-63.

Therefore the examiner submits it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Ice into the system of Monteiro in order provide an efficient system that does not only relay information but utilizes the information, to cut down load on the various server(s) broadcasting information on a network.

Monteiro as modified by Ice, fail to explicitly teach "each IRRT includes a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and be retransmitted to another IRRT."

However, note the **Fujita et al** reference figure 1, disclose A/V Server Device 10 with a receiving buffer 40, transmitting buffer 50, primary/secondary storages 60/70 and a server control unit 90 (figure 1 and col. 5, line 56-col. line 3), where A/V Server 10 receives A/V temporarily stores the received data at real time, and under the control of Server Control Unit 90, the A/V data is reproduced "rendered" and transferred to subnetwork 59 (col. 6, lines 23-32 and line 34+); the A/V data is further transferred to Transmitting Buffer Unit 50 (figure 5 and col. 8, lines 18-67) where A/V data is brought back to base band signal and the same A/V data is transmitted outside (col. 8, lines 52-59). Note further that TCP/IP protocol can be used (col. 6, lines 33-36).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Fujita into the system of Monteiro as

modified by Ice to provide A/V Server with receiving/transmitting buffer(s) or a buffer with forward/past portion(s), for broadcasting data and to temporarily store, render and transmit the same broadcast data.

As to claim 2, Monteiro further discloses a communication system comprising a plurality of secondary broadcast servers, Primary Servers 20, coupled to the Internet and each for originating respective secondary broadcast information, commercial advertisements, that is chaincast among the group of Media Servers 30 of the plurality of Media Servers, note col. 3, lines 1-25.

As to claim 3, Monteiro further discloses a communication system where the chaincast managers, Administration Server 60 and Control Server 50, are also for scheduling information transfers of the secondary broadcast information to Media Servers 30, note col. 3, lines 39-63.

As to claim 4, Monteiro further discloses a communication system where the chaincast managers, Administration Server 60 and Control Server 50, are also for supplying a respective Media Servers 30 with a list of all the registered primary broadcast servers, Satellite, Cable, Broadcast and Hard disk, in response to a request by the respective Media Server for the list, note col. 14, lines 42-67.

As to claim 5, Monteiro further discloses a communication system where the primary broadcast is digitally encoded audio information representing audio programs and where the plurality of broadcast servers, are radio station, note Figure 1, col. 3, lines 1-12 and col. 4, lines 18-27.

As to claim 6, Monteiro further discloses a communication system where the Media Server 30 comprises a computer system for rendering a graphical user interface display of a radio device 40 coupled to the Media Server 30 for allowing a user to request one or more primary servers from which to receive primary broadcast information, note col. 5, lines 14-26 and col. 17, lines 26-67.

As to claim 7, Monteiro further discloses a communication system where the primary broadcast is digitally encoded audio/visual information representing audio/visual programs and where the plurality of broadcast servers, are radio station, note col. 3, lines 1-12 and col. 4, lines 18-27.

As to claim 8, Monteiro further discloses a communication system where the primary broadcast is digitally encoded audio/visual information representing audio/visual programs and where the plurality of broadcast servers, are radio station, note col. 3, lines 13-38.

As to claim 9, Monteiro further discloses a communication system where the secondary broadcast is digitally encoded audio information representing advertising content and where the secondary broadcast servers, Primary Servers 20, are advertisers, note col. 3, lines 13-38.

As to claim 10, Monteiro further discloses a communication system where the secondary broadcast is digitally encoded audio/visual information representing advertising content and where the secondary broadcast servers, Primary Servers 20, are advertisers, note col. 3, lines 1-36 and col. 7, line 66-col. 8, line 24.

As to claim 11, Monteiro further discloses a communication system where the secondary broadcast is digitally encoded information representing news material, note col. 3, lines 1-36 and col. 4, lines 34-65.

As to claim 12, note the Monteiro et al reference Figures 1, 3 and 4, disclose a multicasting method and apparatus and a scalable architecture for delivery of real-time information over a communication network where multiple streams of information can be delivered to a user, and certain portions of the information being delivery can be tailored to individual user and further discloses a communication system comprising the following: the claimed "plurality of information receiver and re-transmitter devices (IRRTs)..." are met by plurality of Media Servers (MSs) 30 which are coupled to the Internet, note each MSs 30 is coupled the Internet and streams audio and video data using UDP protocol under IP and TCP/IP protocol (col. 6, line 66-col. 7, line 10 and col. 8, lines 42-49), and each MS 30 receives broadcast information and selectively retransmits the broadcast information to a plurality of MSs 30, note col. 3, lines 1-25 and col. 5, line 66-col. 6, line 34, the claimed "plurality of primary broadcast servers..." are met by the plurality of broadcast stations: Satellite, Cable, Broadcast and Hard disk which feeds broadcast to Network 10, the Internet, each for originating respective radio broadcast information that is chain-cast among a group of MSs 30 of the plurality of Media Servers 30, the claimed "plurality of secondary servers..." are met by Primary Servers 20, each for originating respective advertisement broadcast information, ads, that is chain-cast among a group of MSs 30 of a plurality of Media Servers 30, the claimed "chaincast manager..." is met by Administration Server 60 and Control Servers

50 which are coupled to the internet and for registering the plurality of primary and secondary broadcast servers and for scheduling information transfers of the radio broadcast information to MSs 30 based on the broadcast requests generated by the Media Servers to the Administration Server 60 and Control Server 50, and where the Administration Server 60 and Control Server 50 are also for supplying a respective Media Server with a list of all registered broadcasters in responses to a request by the respective Media Server for the list, note Figure 1 and col. 14, lines 42-67. Monteiro teaches Media servers that receives and forward information, but fails to specifically teach rendering the information at the various Media Servers.

However, note the Ice reference figure 1, discloses a method for making connections on the internet, and for causing connections to be made among client systems into a broadcast network where a plurality of Client Systems (Cn), note figure 1 and col. 2, lines 1-22, are couple to the Internet and receive and render broadcast information and selectively retransmit the broadcast information to other Clients, note that after C1 and C2 establishes direct connection to Server A, when a new Client C3 requests a connection to server A it receives an instruction from server A for connection to Client C1 and similarly additional Clients C4-C6 follow same sequence as instructed by Server A, note also that the client system may be performing calculations or providing other functions for the user and the command to make a new connection could come from the user interaction with the system, note col. 3, line 50-63.

Therefore the examiner submits it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Ice into

the system of Monteiro in order provide an efficient system that does not only relay information but utilizes the information, to cut down load on the various server(s) broadcasting information on a network.

Monteiro as modified by Ice, fail to explicitly teach "each IRRRT includes a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and be retransmitted to another IRRRT."

However, note the **Fujita et al** reference figure 1, disclose A/V Server Device 10 with a receiving buffer 40, transmitting buffer 50, primary/secondary storages 60/70 and a server control unit 90 (figure 1 and col. 5, line 56-col. line 3), where A/V Server 10 receives A/V temporarily stores the received data at real time, and under the control of Server Control Unit 90, the A/V data is reproduced "rendered" and transferred to subnetwork 59 (col. 6, lines 23-32 and line 34+); the A/V data is further transferred to Transmitting Buffer Unit 50 (figure 5 and col. 8, lines 18-67) where A/V data is brought back to base band signal and the same A/V data is transmitted outside (col. 8, lines 52-59). Note further that TCP/IP protocol can be used (col. 6, lines 33-36).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Fujita into the system of Monteiro as modified by Ice to provide A/V Server with receiving/transmitting buffer(s) or a buffer with forward/past portion(s), for broadcasting data and to temporarily store, render and transmit the same broadcast data.

Claim 13 is met as previously discussed with respect to claim 3.

Claim 14 is met as previously discussed with respect to claim 5.

Claim 15 is met as previously discussed with respect to claim 6.

As to claim 16, Monteiro further discloses a communication broadcast information method over the Internet and a scalable architecture for delivery of real-time information over a communication network where multiple streams of information can be delivered to a user, and certain portions of the information being delivery can be tailored to individual user and further discloses a method of communicating broadcast information over the Internet comprising the following: the primary broadcast (PB) servers, Satellite, Cable, broadcast and hard disk, causes the first stream of data representing primary broadcast (PB) information to a first user device 40, Media Server (MS) 30 note user device is coupled to the MS 30, and the PB information where the user device, MS 30 and the PB servers are coupled to the Internet, note each MSs 30 is coupled the Internet and streams audio and video data using UDP protocol under IP and TCP/IP protocol (col. 6, line 66-col. 7, line 10 and col. 8, lines 42-49), and further causing the MS 30 to communicate a second stream of data packets representing the PB information to a user device couple to a second MS 30 and the PB information where the MS 30 is coupled to the Internet and configured for forwarding the PB information, causing the first M3 30 to communicate a third stream of data packets representing the PB information to a third MS 30 and forwarding the PB information, and where the third MS 30 is coupled to the Internet and configured for forwarding the PB information, note col. 5, line 57-col. 6, line 34, Administration Server 60 and Control Server 50 monitors a packet rate of stream and in response to the packet rate falling

below a pre-determined rate, causing the MS 30 to communicate a fourth stream of data packets representing the primary broadcast information to the third Media Server 30, note col. 14, line 42-col. 15, line 25. Monteiro teaches Media servers that receives and forward information, but fails to specifically teach rendering the information at the various Media Servers.

However, note the Ice reference figure 1, discloses a method for making connections on the internet, and for causing connections to be made among client systems into a broadcast network where a plurality of Client Systems (Cn), note figure 1 and col. 2, lines 1-22, are couple to the Internet and receive and render broadcast information and selectively retransmit the broadcast information to other Clients, note that after C1 and C2 establishes direct connection to Server A, when a new Client C3 requests a connection to server A it receives an instruction from server A for connection to Client C1 and similarly additional Clients C4-C6 follow same sequence as instructed by Server A, note also that the client system may be performing calculations or providing other functions for the user and the command to make a new connection could come from the user interaction with the system, note col. 3, line 50-63.

Therefore the examiner submits it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Ice into the system of Monteiro in order provide an efficient system that does not only relay information but utilizes the information, to cut down the load on the various server(s) broadcasting information on a network.

Monteiro as modified by Ice, fail to explicitly teach "each IRRT includes a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and be retransmitted to another IRRT."

However, note the **Fujita et al** reference figure 1, disclose A/V Server Device 10 with a receiving buffer 40, transmitting buffer 50, primary/secondary storages 60/70 and a server control unit 90 (figure 1 and col. 5, line 56-col. line 3), where A/V Server 10 receives A/V temporarily stores the received data at real time, and under the control of Server Control Unit 90, the A/V data is reproduced "rendered" and transferred to subnetwork 59 (col. 6, lines 23-32 and line 34+); the A/V data is further transferred to Transmitting Buffer Unit 50 (figure 5 and col. 8, lines 18-67) where A/V data is brought back to base band signal and the same A/V data is transmitted outside (col. 8, lines 52-59). Note further that TCP/IP protocol can be used (col. 6, lines 33-36).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Fujita into the system of Monteiro as modified by Ice to provide A/V Server with receiving/transmitting buffer(s) or a buffer with forward/past portion(s), for broadcasting data and to temporarily store, render and transmit the same broadcast data.

As to claim 17, Monteiro inherently teaches a method where the Administration Server 60 and Control Server 50 monitoring a number of un-rendered data packets stored in a transmission buffer of the Media Server 30 and in response to the number of un-rendered transmission level, causing the Media Server to signal to the Administration

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Server 60 and Control Server 50, to select the second Media Server, note, col. 14, line 42-col. 15, line 25.

As to claim 18, Monteiro further discloses a method comprising the steps of adding multi-levels of Media Servers 30, and causing one Media Server to communicate streams of data packets representing the primary broadcast information to the other Media Servers, note col. 5, line 65-col. 6, line 34 and col. 14, line 42-col. 15, line 25.

As to claim 19, Monteiro further discloses a method where the steps of adding comprises the steps of registering the Media Server with the Administration Server 60 and Control Server 50, which are couple to the internet, and Administration Server 60 and Control Server 50, further instructs the Media Server to communicate a stream of data to another Media Server, note col. 5, line 65-col. 6, line 34 and col. 14, line 42-col. 15, line 25.

As to claim 20, Monteiro further discloses a method comprising the steps of adding a secondary server, Primary Server 20, on the Internet, causing Primary Server 20 to communicate stream of data packets representing secondary broadcast information, commercial advertisements, to the first Media Server 30 and rendering the commercial advertisements to the first Media Server 30 and causing the first Media Server 30 to communicate stream of data packets representing the commercial advertisements to other Media Servers 30 and rendering the commercial advertisements on the other Media Servers 30, note col. 3, lines 1-36, col. 7, line 66-col. 8, line 29.

As to claim 21, Monteiro further discloses a method where the steps of adding comprises the steps of registering the Primary Server 20 with the Administration Server 60 and Control Server 50, which are couple to the internet, and Administration Server 60 and Control Server 50, further instructs the Primary Server 20 to communicate a stream of data to Media Server 30 and instructs the Media Server 30 to communicate stream of data packets to other Media Servers 30, note col. 5, line 65-col. 6, line 34 and col. 14, line 42-col. 15, line 25.

As to claim 22, Monteiro further discloses a method comprises the step of the Media Server 30 rendering the primary broadcast information simultaneously with commercial broadcast information, note col. 7, line 66-col. 8, line 29.

As to claim 23, Monteiro further discloses a method where the Media Servers 30, each comprises a hardware Internet radio device, note col. 7, lines 23-50.

Claim 24 is met as previously discussed with respect to claim 5.

Claim 25 is met as previously discussed with respect to claim 1.

As to claim 26, Monteiro further discloses a method of communicating Web content over the Internet, note Figures 1 and 3, and a scalable architecture for delivery of real-time information over a communication network where multiple streams of information can be delivered to a user, and certain portions of the information being delivery can be tailored to individual user and further discloses a method of communicating Web content over the Internet comprising the following: the claimed "causing a Web Server..." is met by is met by Administration Server (AdmS) 60 and Control Servers (CS) 50 which are coupled to the internet, note each CS is coupled the

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Internet and streams audio and video data using UDP protocol under IP and TCP/IP protocol (col. 6, line 66-col. 7, line 10 and col. 8, lines 42-49), note also Figure 1 and col. 3, lines 13-63, and for registering the plurality of primary and secondary broadcast servers, and communicates a first stream of data packets representing content of URL (Universal Resource Locator) to a first user device 40 coupled to First MS 30 and causing the first MS 30 to relay the content when the URL is accessed by the MS 30, note col. 7, lines 52-65, and causing the MS 30 to communicate a second stream of data packets representing the content of the URL to other MSs 30 and causing the other MS to relay the content when the MS 30 accesses the URL simultaneously with the First MS 30, note col. 3, lines 1-25 and col. 7, line 52-col. 8, line 4. Monteiro teaches Media servers that receives and forward information, but fails to specifically teach rendering the information at the various Media Servers.

However, note the **Ice** reference figure 1, discloses a method for making connections on the internet, and for causing connections to be made among client systems into a broadcast network where a plurality of Client Systems (Cn), note figure 1 and col. 2, lines 1-22, are couple to the Internet and receive and render broadcast information and selectively retransmit the broadcast information to other Clients, note that after C1 and C2 establishes direct connection to Server A, when a new Client C3 requests a connection to server A it receives an instruction from server A for connection to Client C1 and similarly additional Clients C4-C6 follow same sequence as instructed by Server A, note also that the client system may be performing calculations or

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providing other functions for the user and the command to make a new connection could come from the user interaction with the system, note col. 3, line 50-63.

Therefore the examiner submits it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Ice into the system of Monteiro in order provide an efficient system that does not only relay information but utilizes the information, to cut down the load on the various server(s) broadcasting information on a network.

Monteiro as modified by Ice, fail to explicitly teach "each IRRT includes a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and be retransmitted to another IRRT."

However, note the **Fujita et al** reference figure 1, disclose A/V Server Device 10 with a receiving buffer 40, transmitting buffer 50, primary/secondary storages 60/70 and a server control unit 90 (figure 1 and col. 5, line 56-col. line 3), where A/V Server 10 receives A/V temporarily stores the received data at real time, and under the control of Server Control Unit 90, the A/V data is reproduced "rendered" and transferred to subnetwork 59 (col. 6, lines 23-32 and line 34+); the A/V data is further transferred to Transmitting Buffer Unit 50 (figure 5 and col. 8, lines 18-67) where A/V data is brought back to base band signal and the same A/V data is transmitted outside (col. 8, lines 52-59). Note further that TCP/IP protocol can be used (col. 6, lines 33-36).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Fujita into the system of Monteiro as

modified by Ice to provide A/V Server with receiving/transmitting buffer(s) or a buffer with forward/past portion(s), for broadcasting data and to temporarily store, render and transmit the same broadcast data.

As to claim 27, Monteiro further disclose a method comprising the steps of second Media Server receiving the user inputs indicative of the URL and causing the second Media Server to transmit the URL to the Administration Server 60 and Control Servers 50 which are coupled to the internet and where Administration Server 60 and Control Servers 50 are for scheduling information transfers of the Web Server to the Media Servers 30, note Figure 1, col. 3, lines 1-29 and col. 7, line 52-col. 8, line 4.

As to claims 28 and 29, Monteiro further disclose a method where the Media Servers 30 comprises a computer system, with a Web browser software having a plug-in module with multicasting capability, note col. 7, line 52-col. 8, line 4.

As to claim 30, note the Monteiro et al reference Figures 1, 3 and 4, disclose a multicasting method and apparatus and a scalable architecture for delivery of real-time information over a communication network where multiple streams of information can be delivered to a user, and certain portions of the information being delivery can be tailored to individual user and further discloses a communication comprising following: the claimed "plurality of information receiver and re-transmitter devices (IRRTs)..." are met by plurality of Media Servers (MS) 30 which are coupled to the Internet, note each MSs 30 is coupled the Internet and streams audio and video data using UDP protocol under IP and TCP/IP protocol (col. 6, line 66-col. 7, line 10 and col. 8, lines 42-49), and each MS 30 receives broadcast information and selectively retransmits the broadcast

information to a plurality of MSs 30, note col. 3, lines 1-25 and col. 5, line 66-col. 6, line 34, the claimed "plurality of primary broadcast servers..." are met by the plurality of broadcast stations: Satellite, Cable, Broadcast and Hard disk which feeds broadcast to Network 10, the Internet, each for originating respective primary broadcast (PB) information that is chain-cast among a group of MSs 30 of the plurality of MSs 30, the claimed "plurality of secondary servers..." are met by Primary Servers 20, each for originating respective secondary broadcast information, ads, that is chain-cast among a group of MSs 30 of a plurality of MSs 30, the claimed "chaincast manager..." is met by Administration Server 60 and Control Servers 50 which are coupled to the internet and for registering the plurality of primary and secondary broadcast servers and for scheduling information transfers of the respective primary broadcast information to MSs 30 based on the broadcast requests generated by the MSs 30 to the Administration Server 60 and Control Server 50, note Figure 1 and col. 3, lines 13-63. Monteiro teaches Media servers that receives and forward information, but fails to specifically teach rendering the information at the various Media Servers.

However, note the **Ice** reference figure 1, discloses a method for making connections on the internet, and for causing connections to be made among client systems into a broadcast network where a plurality of Client Systems (Cn), note figure 1 and col. 2, lines 1-22, are couple to the Internet and receive and render broadcast information and selectively retransmit the broadcast information to other Clients, note that after C1 and C2 establishes direct connection to Server A, when a new Client C3 requests a connection to server A it receives an instruction from server A for connection

to Client C1 and similarly additional Clients C4-C6 follow same sequence as instructed by Server A, note also that the client system may be performing calculations or providing other functions for the user and the command to make a new connection could come from the user interaction with the system, note col. 3, line 50-63.

Therefore the examiner submits it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Ice into the system of Monteiro in order provide an efficient system that does not only relay information but utilizes the information, to cut down the load on the various server(s) broadcasting information on a network.

Monteiro as modified by Ice, fail to explicitly teach "each IRRT includes a transmission buffer having a buffer forward portion for storing broadcast information to be rendered and a buffer past portion for storing broadcast information that has been rendered and be retransmitted to another IRRT."

However, note the **Fujita et al** reference figure 1, disclose A/V Server Device 10 with a receiving buffer 40, transmitting buffer 50, primary/secondary storages 60/70 and a server control unit 90 (figure 1 and col. 5, line 56-col. line 3), where A/V Server 10 receives A/V temporarily stores the received data at real time, and under the control of Server Control Unit 90, the A/V data is reproduced "rendered" and transferred to subnetwork 59 (col. 6, lines 23-32 and line 34+); the A/V data is further transferred to Transmitting Buffer Unit 50 (figure 5 and col. 8, lines 18-67) where A/V data is brought back to base band signal and the same A/V data is transmitted outside (col. 8, lines 52-59). Note further that TCP/IP protocol can be used (col. 6, lines 33-36).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Fujita into the system of Monteiro as modified by Ice to provide A/V Server with receiving/transmitting buffer(s) or a buffer with forward/past portion(s), for broadcasting data and to temporarily store, render and transmit the same broadcast data.

Claim 31 is met as previously discussed with respect to claim 3.

Claim 32 is met as previously discussed with respect to claim 4.

Claim 33 is met as previously discussed with respect to claim 5.

Claim 34 is met as previously discussed with respect to claim 6.

Claim 35 is met as previously discussed with respect to claim 7.

Claim 36 is met as previously discussed with respect to claim 8.

Claim 37 is met as previously discussed with respect to claim 9.

Claim 38 is met as previously discussed with respect to claim 10.

Claim 39 is met as previously discussed with respect to claim 11.

Response to Arguments

3. Applicant's arguments with respect to claims 1-39 have been considered but are moot in view of the new ground(s) of rejection discussed above. Applicant argues that there is "no suggestion, motivation, or teaching found in Monteiro and Ice to combine." Examiner disagrees since in both references as were as the newly cited reference (Fujita et al), uses TCP/IP protocol or UDP protocol under IP to stream data (audio, video, etc.,) over the Internet. Amendment to all the claims necessitated the new grounds of rejection discussed above. This Office Action is made FINAL.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Seitz (5,377,329) discloses reducing data transmission by indexing caching where a sender 10 transmit data and a receiver 20 receives, decodes and output the same data out (figure 1 and col. 2, lines 27-44).

Takahashi et al (5,550,978) disclose "multiprocessor system..." and further disclose a receiving and transmitting buffers (figure 2 and col. 6, lines 6-31).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q Shang** whose telephone number is **703-305-2156**. The examiner can normally be reached on **700am-500pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John W Miller** can be reached on **703-305-4795**. The fax phone numbers for the organization where this application or proceeding is assigned are **703-746-5991** for regular communications and **703-746-5991** for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Customer Service** whose telephone number is **703-306-0377**.



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